

REMARKS

In view of the above amendments and the following remarks, reconsideration of the present application is respectfully requested.

Claims 1-12 are pending. Claims 13-16 have been withdrawn from consideration. Claims 1-12 have been rejected. Claims 1 and 9-12 have been amended. No new matter has been introduced by the amendments.

Rejections under 35 U.S.C. § 112

Claims 5-12 have been rejected under 35 U.S.C. § 112, 2nd paragraph, for indefiniteness.

Claim 1 has been amended to recite "...each type or species or target..." It is now clear that the species recited in claim 5, which is dependent on claim 1, is required to have different nucleotide patterns. Support for this amendment is found at paragraph [0003].

Claim 9 has been amended to recite "...wherein semi-conservative regions are sequenced", thereby rendering the claim clear and definite.

Claims 10-12 have been amended to clarify and present the claims in active form, thereby rendering the claims clear and definite.

In view of the clarifying amendments to claims 1 and 9-12, removal of the rejection of claims 5-12 is respectfully requested.

Rejections under 35 U.S.C. § 102(b)

Claims 1-12 have been rejected under 35 U.S.C. 102(b) as anticipated by Rady et al., "Type-specific Primer-mediated Direct Sequencing of Consensus Primer-generated PCR Amplicons of Human Papilloma Viruses; A New Approach for the Simultaneous Detection of Multiple Viral Type Infections" J. of Virol. Methods 53:245-254 (1995) (Rady).

Rady discloses a method of detecting human papillomavirus (HPV) types by "Direct sequencing of the amplified and purified target HPV-DNA fragments...carried

out by using consensus primers MY11, MY09 and GP1-2...and type-specific HPV primers as sequencing primers ...” As indicated by Table I, and as shown in Figures 2 and 3 of Rady, a single type-specific primer pair for HPV-6, 11, 16, 18 and 33 is used in separate individual sequencing reactions. Indeed, in a communication dated January 8, 2007, Rady indicates to co-author Stephen Tying that they use a single type-specific primer for each reaction and that they did not use multiple type-specific sequencing primers as a pool. See Appendix A.

In contrast, the method of the present invention consists of a single sequencing reaction used to examine a single sample, using a “...mixed pool of at least two structurally different sequencing oligonucleotide primers, whereby each primer is designed for being specific for one type or species or group or target...” as sequencing primers. Support for the amendment to claim 1 is found at paragraph [0017]. It is therefore clear that the mixed pool necessarily contains at least two structurally different sequencing primers for use in a single sequencing reaction, thereby allowing at least two targets to be sequenced simultaneously.

With regard to the term “mixed pool,” even if the term is given its broadest interpretation, one of ordinary skill in the art would not consider an aliquot of identically structured primers as a mixed pool. Applicants concede that limitations appearing in the specification should not be read into a claim, however claims must be interpreted “in view of the specification.” *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). In view of the specification, it would have been obvious to one of ordinary skill in the art that the present invention provides a method for genotyping, typing, identifying, detecting and sequencing nucleic acid molecules, from completely different species or organisms present in a single sample, using at least two distinct structurally different sequencing primers, i.e., a mixed pool.

Since Rady neither teaches nor suggests using a mixed pool of at least two structurally different oligonucleotide primers for genotyping, typing, identification, detection and sequencing nucleic acid molecules from a range of different types of samples, Rady does not anticipate claim 1 of the present invention. Therefore, applicant requests the rejection of claim 1, and claims 2 and 12 dependent thereon, be withdrawn.

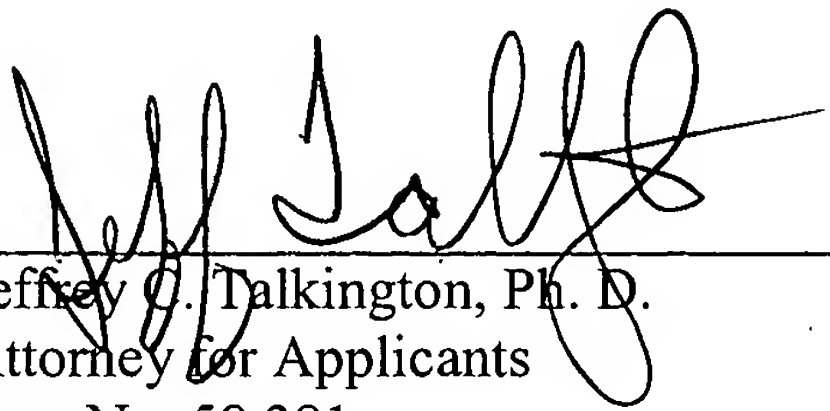
Conclusion

Since all claims are in a condition for allowance, the issuance of a Notice of Allowability is respectfully requested. Should the examiner have any questions or concerns, the Examiner is invited to call the undersigned attorney of record.

Respectfully submitted,

Date: March 12, 2007

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